STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

September 28, 2004

REGISTERED MAIL
RR 359 893 125 US

Timothy L. Powell
Georgia Strait Crossing Pipeline LP
2800 Post Oak Boulevard
Houston TX 77056-6100

Dear Mr. Powell:

RE: **Order # 1704**
U.S. Army Corps of Engineers # 200301064
Water Quality Certification for construction of 47.3 miles of 16- and 20-inch gas pipeline from Sumas, Washington to Canadian border in Strait of Georgia; Whatcom and San Juan County, Washington.

The request for certification which was received by the Department of Ecology on September 29, 2003 for proposed work in and adjacent to water in Whatcom and San Juan Counties has been reviewed. On behalf of the State of Washington, we certify that the proposed work, as conditioned by the enclosed Order, will comply with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and other appropriate requirements of State law. This letter also serves as the State response to the Corps of Engineers.

This certification is subject to the conditions contained in the enclosed Order. If you have any questions, please contact Alice Kelly at (425) 649-7145. Written comments can be sent to her at the Department of Ecology, 3190 – 160th Ave. SE, Bellevue, WA 98008. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Jeannie Summerhays
Section Manager
Shorelands and Environmental Assistance Program

Enclosure

JS:AK:rc
cc: Olivia Romano – Corps of Engineers
Andrew Craig – Ecology
Tiffany Yelton – Ecology
Richard Robohm - Ecology
Yvonne Oliva – Ecology
Brian Williams – WDFW
Richard Grout – Ecology

IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO Georgia Strait Crossing Pipeline LP in accordance with 33 U.S.C. 1341 FWPCA § 401, RCW 90.48.120, RCW 90.48.260 and Chapter 173-201A WAC	)))))))	**ORDER # 1704** **Corps Reference # 200301064** Construction of 47.3 miles of 16- and 20-inch gas pipeline from Sumas, Washington to Canadian border in Strait of Georgia; cross 87 rivers and streams, 230 wetland areas, temporary impact to 59.3 acres of wetlands; permanent impact to 3.5 acres of wetlands; Whatcom and San Juan Counties, Washington.

TO: Timothy L. Powell
Georgia Strait Crossing Pipeline LP
2800 Post Oak Boulevard
Houston TX 77056-6100

On November 24, 2003, a public notice for issuance of a water quality certification from the State of Washington was distributed by the U.S. Army Corps of Engineers for the above-referenced project pursuant to the provisions of 33 U.S.C. 1341 (FWPCA§ 401). The proposed project involves installation of approximately 32 miles of 20-inch diameter pipeline from the US-Canada border near Sumas, across Whatcom County to a new compressor station near Cherry Point; about 1.1 miles of 16-inch diameter pipeline from the compressor station to beginning of marine portion of the pipeline at the edge of Strait of Georgia; and 13.9 miles of 16-inch marine pipeline from Cherry Point to the international border between the US and Canada at a point midway between Patos Island (Washington) and Saturna Island (British Columbia) in Boundary Pass.

The work will consist of the excavation and backfill of native material for burial of the pipeline, associated land clearing, and construction of temporary workspaces and drill sites. Thirty-one wetland areas will be bored or horizontal directional drilled (HDD) and any wetland impacts associated with these crossings are unanticipated. Of the 87 river, stream and ditch crossings, 15 will be bored, and eight will be HDD, including south crossing of Saar Creek, Sumas River, Johnson Creek, Fishtrap Creek, Pepin Creek, Double Ditch Creek, East and West Guide Meridian Creeks, Bertrand Creek, SF Dakota Creek, California Creek, and Terrell Creek.

The horizontal direction drill method will be used at Cherry Point to drill underneath the beach and nearshore habitat. Approximately 2,000 cubic yards of sediment will be excavated by clamshell dredge from the marine sediments for the HDD exit point. This excavated area will not be backfilled after the HDD is complete, but will be allowed to fill in by natural sedimentation. From the exit point, the pipeline will be placed in a shallow trench to a water depth of about -240 feet.

The proposed construction will temporarily impact 59.34 acres of wetlands and result in the permanent conversion of a maximum of 3.48 acres of shrub-scrub and forested wetlands to emergent or scrub-shrub wetlands.

The project is located in wetlands, streams, rivers, and the Strait of Georgia in Whatcom and San Juan Counties.

For purposes of this Order, the term "Applicant" shall mean Georgia Strait Crossing Pipeline LP and its agents, assigns, and contractors.

AUTHORITIES:

In exercising authority under 33 U.S.C. 1341, RCW 90.48.260, and RCW 90.48.120, the Department of Ecology (Ecology) has investigated this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. Sections 1311, 1312, 1313, 1316, and 1317 (FWPCA Sections 301, 302, 303, 306, and 307);

2. Conformance with the state water quality standards as provided for in Chapter 173-201A WAC authorized by 33 U.S.C. 1313 and by Chapter 90.48 RCW, and with other appropriate requirements of state law; and,

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

In view of the foregoing and in accordance with 33 U.S.C. 1341, RCW 90.48.260, RCW 90.48.120 and Chapter 173-201A WAC, a Clean Water Act Section 401 water quality certification and state water quality order are granted to Georgia Strait Crossing Pipeline LP (Applicant) subject to the following conditions within this Order:

A. Purpose of Pipeline:

The purpose of the project is to transport gas supplies from the U.S.-Canadian border at Sumas to Vancouver Island, British Columbia, Canada.

A1. This Order shall be withdrawn immediately in the event that a natural gas powered electric-generation facility is not approved for construction on Vancouver Island, British Columbia, Canada.

A2. Construction shall not commence until the Applicant provides Ecology with written documentation that an electric-generation facility has been approved.

B. No Further Impairment of Existing Water Quality:

B1. This Order does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC) or sediment quality standards (Chapter 173-204

WAC). Water quality criteria contained in WAC 173-201A-030(1) and WAC 173-201A-040 shall apply to this project, unless otherwise authorized by Ecology. This Order does not authorize temporary exceedances of water quality standards for turbidity beyond the limits established in WAC 173-201A-110(3). Furthermore, nothing in this Order shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters or sediments occurring as a result of project construction or operations.

C. Notification and Preconstruction Meeting:

C1. The Applicant shall submit an updated application to Ecology if the information contained in the JARPA received September 29, 2003 is altered by route modification or facility relocation submittals to the federal agency and/or state agencies. Within 30 days of receipt of an updated application Ecology will determine if a modification to this Order is required. All submittals shall be sent to Department of Ecology, Federal Permit Coordinator, 3190 - 160th Avenue SE, Bellevue, WA 98008-5452 and display Order Number 1704.

C2. Approximately 60 days before any construction begins, the Applicant shall hold a pre-construction meeting between the project manager, all necessary construction contractors, and State agency representatives including Ecology and Washington Department of Fish and Wildlife. During this meeting, site conditions, permit specifications and the requirements of the water quality monitoring plan, Stormwater Pollution Prevention Plan (SWPPP), and the Erosion and Sediment Control Plans will be reviewed. This will assist all involved parties in understanding the intent, specifications, and requirements of the permits and plans. Notification of the meeting and submittal of the water quality monitoring plan, Stormwater Pollution Prevention Plan (SWPPP), and the Erosion and Sediment Control Plans to Ecology shall occur at least 15 working days in advance of the meeting. All plan submittals shall be sent to Department of Ecology, Federal Permit Coordinator, 3190 160th Avenue SE, Bellevue, WA 98008-5452 and to Andrew Craig, Bellingham Field Office WQ Inspector, 1204 Railroad Avenue, Suite 200, Bellingham, WA 98225. The project construction schedule shall also be provided with the meeting notification.

D. Wetlands Mitigation:

The following conditions apply to the Applicant's work in wetlands and the required mitigation for impacts to wetlands:

D1. All trenches shall be re-filled with native material and the top 12 inches of soil shall be replaced in-situ within the trenches in order to preserve the seed bank.

D2. Drill and bore entry and exit points, and all associated excavated soils and drilling mud associated with drilling activities will be located outside forest and scrub-shrub wetlands to the extent possible.

D3. Valve site locations or layout areas will be selected or designed to avoid permanent fill in wetlands.

D4. The Cherry Point compressor station will be relocated from its originally proposed location to avoid permanent fill in a palustrine emergent wetland.

D5. The pipeline alignment and work areas will be designed or modified where possible to avoid wetlands.

D6. Staging areas, pipe storage sites and other ancillary facilities will be located on upland sites.

D7. Existing pipeline, road and powerline corridors will be followed to the maximum extent possible.

D8. The construction right-of-way will be narrowed from 100 to 75 feet (except in agricultural wetlands and certain extra workspace areas).

D9. Mitigation for wetland impacts in Whatcom County shall be accomplished on the designated sites as located and described in *Preliminary Compensatory Wetland Mitigation Plan -Georgia Strait Crossing Project,* dated June 2003, *Supplemental Compensatory Wetland Mitigation Plan – California Creek Site*, dated May 24, 2004 and *Wetland and Riparian Restoration Plan – Georgia Strait Crossing Project*, dated June 2003. **Absent express written authorization from Ecology, the mitigation plan and location of the mitigation site shall not be modified.** The following additions and clarifications to the plans referenced above are:

a. Final planting plans for the compensatory wetland mitigation sites (for both the California Creek and Kickerville sites) shall be submitted to Ecology by December 31, 2004. The planting plans shall include at a minimum, plant species, spacing, source of materials, condition, and full planting specifications.

b. All on-site restoration plantings must be installed according to the Wetland and Riparian Restoration Plan, dated June 2003, regardless of property owner preference.

c. The Applicant must provide Ecology with a signed statement from each property owner where restoration will occur, indicating that the property owner understands and will abide by the restoration plan for that portion of the project. The signed statements shall be provided to Ecology seven (7) days prior to commencing

construction on each piece of property. Failure to obtain and submit this information to Ecology may result amendment of this Order as well as project delays until such information is provided to Ecology.

d. Performance Standards: Measurements of success for all replanted areas shall be determined by assessing the rate of survival for the first two monitoring years and percent cover of desirable native plant species for the remaining monitoring years. Success standards shall be as follows:

    1. 100% of planted species will survive or be replanted after the first year of planting.

    2. An 80% survival rate will be attained during the second monitoring year.

    3. Native plant species will have an aerial cover at least 20% of each mitigation or restored area during the third monitoring year, 30% during the fifth year, 50% the 7th year, and 75% the 10th year.

    4. There shall be no more than 10% cover of non-native invasive plant species in any restoration or mitigation area during the monitoring periods..

e. Monitoring: A detailed monitoring program, including how percent cover of native plant species will be measured, shall be developed to reflect the performance standards outlined above. Copies of all monitoring reports shall be submitted to Ecology at 3190 – 160th Avenue SE, Bellevue, WA, 98008-5452, as well as to the U.S. Army Corps of Engineers by December 31 of each monitoring year. If the results of the monitoring at year ten (10) show that the mitigation area does not satisfy the performance standards set forth above, additional monitoring and mitigation may be required (e.g., replanting, soil amendments, selection of alternative species, etc.). Any additional monitoring or mitigation measures are subject to review and approval of Ecology.

f. Contingency Plans: If monitoring results indicate that performance standards are not being attained for any monitoring year, replanting may be necessary. However, some of the planted species may need to be substituted with other species for one reason or another. The Applicant shall contact the permitting agencies to discuss what contingencies may be necessary, and an on-site meeting may be held to decide how to rectify the problem. The contingency plan approved by Ecology shall then be implemented.

g. Mitigation site access restrictions: Access by Off Road Vehicles (ORV's) to the wetland restoration areas shall be restricted by barriers such as ecology blocks, gates, or some other similar device if it appears that ORV's are impacting vegetation reestablishment.

h. Timing: All mitigation sites and restored sites along the pipeline corridor shall be planted no later than six (6) months after completion of the freshwater and wetland portion of the pipeline in Whatcom County.

i. "As-Built" Report: An "as-built" report documenting the final design of the mitigation project areas shall be prepared when site construction and planting is completed. The report shall include the following:

- Vicinity map showing site access;
- Final site topography;
- Drawings that shall clearly identify the boundaries of the mitigation areas;
- The installed planting scheme showing quantities, densities, sizes, and approximate locations of plants, as well as plant sources and the time of planting;
- Photographs of the area taken from permanent reference points;
- Locations of photopoints, sampling and monitoring sites;
- An analysis of any changes to the mitigation plan that occurred during construction.

j. A copy of the "as-built" report shall be sent to Department of Ecology, Federal Permit Coordinator, 3190 – 160th Avenue SE, Bellevue, WA, 98008-5452, within 90 days of completing plant installation.

k. Deed Restriction: Permanent protection of the wetland mitigation areas shall be recorded on the appropriate property deed. The deed shall clearly indicate that the wetland mitigation areas are "waters of the state." Documentation that this requirement has been fulfilled, including copies of permanent restrictive easements, shall be provided to Ecology's Federal Permit Coordinator at the same time as the "as-built" report.

l. Field Supervision: The wetland enhancement plant installations shall be field-supervised and inspected by a qualified consultant during planting operations as well as after planting has been completed, to ensure proper placement of plants.

m. Maintenance: The Applicant is responsible for maintenance of the wetland mitigation sites such that the required performance standards are met.

D10. Any fractures of the geologic formation resulting in an inadvertent release of drilling mud ("frac-outs") in wetlands or their buffers shall be reported immediately to Ecology's Federal Permit Coordinator [fax (425) 649-7098] the WDFW Area Habitat Biologist, and to Andrew Craig, Water Quality Inspector at the Department of Ecology's Bellingham Field Office [Phone: (360) 738-6250. Fax: (360) 738-6253]. In addition to providing such notice, the applicant shall also report to Ecology the following information:

a. A description of the nature and the cause of the 'frac out', including the quantity and quality of the discharge;

b. The period and duration of the 'frac out', including the exact dates and times and/or the anticipated time of 'frac out';

c. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the 'frac out'.

If this information is provided orally, a written submission of the above criteria shall be submitted by the applicant within five days of the date of the 'frac out, unless Ecology waives or extends this requirement in writing on a case-by-case basis.

Frac-outs must be cleaned up immediately, their location flagged and mapped, photos taken, and monitoring conducted to determine if the wetland or buffer vegetation has reestablished on its own, or if supplemental plantings are needed.

D11. Access: The Applicant shall provide access to all mitigation sites upon request by Ecology personnel for site inspections, monitoring, and necessary data collection to ensure that the wetland mitigation is implemented as approved.

E. Noxious Weeds/Invasive Species:

E1. The Applicant will implement its Noxious Weed Management Plan submitted to Whatcom County and Ecology. The plan will include measures appropriate to control noxious weeds in upland and wetland conditions. Where application of herbicides is prohibited (i.e., within 100 feet of wetlands), the Applicant will manually remove noxious weeds. The Applicant will install native plants to control the spread of noxious weeds, particularly reed canarygrass.

F. In-stream Construction and Crossing of Streams / Waterbodies:

F1. The Applicant shall use clean gravel in the upper 12 inches of backfill to stabilize trenches and reduce sedimentation. This recommendation has been incorporated into the Wetland and Riparian Restoration Plan for fish-bearing and 303(d)-listed streams.

F2. Where possible, the Applicant will avoid the crossing of streams and wetlands. Where such crossings are unavoidable, the Applicant shall implement measures to minimize the disturbance of soils and natural vegetation, minimize the disturbance of in-place sediments and minimize other associated impacts that impair water quality. In addition, the Applicant shall also implement appropriate Best Management Practices (BMP's) during stream and

wetland crossings to control erosion and prevent sediment from reaching state waters (streams and wetlands).

F3. Trenchless methods (horizontal directional drilling or conventional boring) shall be used where technically feasible to cross important streams (and adjacent wetlands) as determined through consultation with WDFW biologists.

F4. The Applicant shall use a non-toxic bentonite clay drilling mud for the horizontal direction drills.

F5. Any fractures ("frac-outs") observed in streams or their buffers (within 100 feet) shall be reported immediately to Ecology's Federal Permit Coordinator [fax (425) 649-7098], the WDFW Area Habitat Biologist, and to Andrew Craig, Water Quality Inspector at the Department of Ecology's Bellingham Field Office [Phone: (360) 738-6250. Fax: (360) 738-6253]. In addition to providing such notice, the applicant shall also report to Ecology the following information:

a. A description of the nature and the cause of the 'frac out', including the quantity and quality of the discharge;

b. The period and duration of 'frac out', including the exact dates and times and/or the anticipated time of 'frac out';

c. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the 'frac out'.

If this information is provided orally, a written submission of the above criteria shall be submitted by the applicant within five days of the date of the 'frac out, unless Ecology waives or extends this requirement in writing on a case-by-case basis.

Frac-outs must be cleaned up immediately, their location flagged and mapped, photos taken, and monitoring conducted to determine if the stream or buffer vegetation has reestablished on its own, or if supplemental plantings are needed.

F6. No culverts may be installed in streams unless specifically authorized by Washington Department of Fish and Wildlife.

F7. The Applicant is responsible for achieving compliance with State of Washington surface water quality standards (chapter 173-201A WAC). When not in compliance with these standards, the Applicant shall take immediate action(s) to achieve compliance by implementing additional Best Management Practices (BMP's) and/or improved maintenance of existing BMP's, and shall notify Ecology in accordance with Condition F8(h) below.

F8. Water Quality Sampling and Monitoring: A Water Quality Monitoring Plan shall be developed and implemented. **The water quality monitoring plan shall be submitted to Ecology for review and approval at least 60 days before construction is scheduled to begin**. Ecology may require the plan to be modified as necessary in order to meet water quality standards for surface waters. The plan shall include the following minimum requirements:

a. Visual monitoring (inspections) of both the work area and the areas upstream and downstream of the work area shall be completed during and between sampling efforts for turbidity. Inspections of these areas shall occur, at a minimum, during work activity and every one (1) hour throughout all in-water construction activity.

b. Sampling for turbidity shall be taken at each in-stream construction location, including all streams crossed by trenching with use of a flume. Sampling shall occur a minimum of every two (2) hours throughout the first day of in-water construction activity. Subsequent sampling is dependent upon monitoring results, but shall be a minimum of three (3) times per day during in-water activity if no exceedances are detected. Sampling and Visual monitoring shall increase if turbidity exceedances are observed or measured to be above the WAC 173-201A-110(3) temporary mixing zone criteria.

c. Locations of water quality sampling sites shall be identified and described in the plan. At a minimum, sampling shall take place at the point of compliance as specified in WAC 173-201A-110(3), and at a site just upstream of the work area to determine background water quality. Beginning sampling at 50 feet downstream is necessary in order to provide a margin of safety to protect water quality.

d. Sampling for turbidity is to be accomplished using a turbidometer properly calibrated according to the operator's manual.

e. If visual inspections or water quality sampling indicates turbidity plume greater than background water quality at 50 feet downstream of the activity, the Applicant shall reduce or eliminate the rate of activity immediately until turbidity at 50 feet downstream matches background conditions. After such an event, the Applicant shall assess the efficacy of the site Best Management Practices (BMP's) and update or improve the BMP's used at the work site in the effort to reduce or prevent recurrence of the turbidity exceedance in the stream (state waters).

f. If the results of turbidity sampling indicate no exceedances of WAC 173-201A 110(3) criteria, results shall be forwarded to Ecology on a weekly basis to Alice Kelly at e-mail akel461@ecy.wa.gov, or fax at (425) 649-7098; and to Andrew Craig, Department of Ecology Bellingham Field Office, fax (360) 738-6253. Turbidity sampling results can be included in a weekly "status report" of

information regarding completed construction for the previous week and proposed construction locations for the upcoming week.

g. If exceedances of the WAC 173-201A 110(3) criteria are detected either by visual inspections or as a result of water quality sampling and monitoring, the Applicant shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem.

h. **Notification of exceedances:** Notification of exceedances of WAC 173-201A 110(3) criteria via visual inspections or water quality sampling shall be made to Ecology within 24 hours of occurrence. The Applicant shall, at a minimum, provide Ecology with the following information:

- A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized discharges
- The period of noncompliance, including exact dates, duration, and times and/or the anticipated time when the Applicant will return to compliance; and
- The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.
- This information shall be transmitted via telephone or facsimile to Ecology's Federal Permit Coordinator at phone (425) 649-7145 or fax (425) 649-7098, and to Andrew Craig, Water Quality inspector at the Bellingham Field Office at phone (360) 676-2217 or fax (360) 738-6253.

i. Reports summarizing the scope of inspections, the personnel conducting the inspection, the results of turbidity sampling (both visual and physical), the date of the inspection and/or sample event, and actions taken as a result of the inspections or monitoring results shall be prepared and retained as part of the water quality monitoring plan and made available to Ecology upon request.

j. In the event that aquatic resources are impacted by inadvertent turbidity exceedances or drilling mud discharges, the Applicant shall develop a mitigation plan in consultation with Ecology within 180 days of the exceedance.

G. Marine Construction:

The following conditions apply to the Applicant's construction in marine waters:

G1. The Applicant will use the HDD technique to install the pipeline from onshore in the Cherry Point area to a depth of –130 feet mean lower low water (MLLW).

G2. In order to minimize barriers to the movement of crabs, the Applicant will place the pipeline in a shallow trench to a depth of approximately –240 feet MLLW for the first 5.6 miles of the marine route.

G3. In order to provide additional protection from potential impacts of trawling gear, the pipe will have a 1.6-inch thick, wire reinforced concrete coating.

G4. The Applicant will ensure that the pipeline is identified on navigational charts.

G5. During pipeline construction, support vessels will act as pilot boats to ensure that fishing vessels are alerted to construction activities.

G6. The Applicant will ensure that a Notification to Mariners is issued prior to construction.

G7. The Applicant will place notices of construction at marinas and in local newspapers, notify the U.S. Coast Guard, and communicate the location of construction vessels to inbound and outbound vessels in the project area.

G8. The offshore terminal exit hole ("glory hole") shall be located, at a minimum, waterward of the -100 depth contour (MLLW = 0.00) as specified in the project plans.

G9. The offshore terminal exit hole ("glory hole") shall be dredged with a clamshell bucket. The dredged materials shall be placed immediately adjacent to the glory hole.

G10. The dimensions of the offshore terminal exit hole ("glory hole") shall be held to the minimum necessary to contain the expected offshore discharge of drilling mud.

G11. The Applicant shall monitor the backfilling of the glory hole during years one (1) and three (3) following project completion. The glory hole monitoring reports for years one (1) and three (3) shall be submitted to the WDFW Area Habitat Biologist and Ecology. After year three (3), if the glory hole has not backfilled to the same elevation as the adjacent bed, the Applicant shall develop contingency measures to backfill the glory hole in consultation with WDFW and Ecology.

G12. The Applicant shall implement the Cherry Point HDD Drilling Mud Release Contingency Plan and Mitigation and Monitoring Plan for Marine Vegetation dated June 2003, with the following conditions and changes:

- Appendix A: The Monitoring and Mitigation Strategy for the Protection of Marine Vegetation Along the GSX HDD Drill Path shall be amended on P. 2 to indicate that HDD drilling under the area between +5.0 to -20.0 tide elevations (MLLW = 0.00) shall occur during daylight hours only. Daylight hours are defined as the time period starting one (1) hour after sunrise and ending one (1) hour before sunset.

- During HDD drilling at Cherry Point under the marine vegetation zone or area between +5.0 to -20.0 tide elevations (MLLW = 0.00), the area shall be monitored by diver inspection every two (2) hours for signs of inadvertent release of drilling mud.

G13. Within one (1) week of completing the horizontal direction drill, the Applicant shall contract a qualified diver/biologist to conduct a dive survey along the pipeline pathway between the +5.0 to -20.0 tide elevations (MLLW = 0) for evidence of an inadvertent release of drilling mud. The survey report shall be submitted to the WDFW Area Habitat Biologist and Ecology within two (2) weeks of survey completion.

G14. In the event of an inadvertent offshore release of drilling mud along the drill path, the offshore drilling operations shall be stopped immediately and reported to Ecology's Federal Permit Coordinator [fax (425) 649-7098], the WDFW Area Habitat Biologist, and to Andrew Craig, Water Quality Inspector at the Department of Ecology's Bellingham Field Office [Phone: (360) 738-6250. Fax: (360) 738-6253]. In addition to providing such notice, the applicant shall also report to Ecology the following information:

a. A description of the nature and the cause of the 'frac out', including the quantity and quality of the discharge;

b. The period of 'frac out', including the exact dates and times and/or the anticipated time of 'frac out';

c. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the 'frac out'.

If this information is provided orally, a written submission of the above criteria shall be submitted by the applicant within five days of the date of the 'frac out', unless Ecology waives or extends this requirement in writing on a case-by-case basis.

G15. In the event that eelgrass habitat is impacted by an inadvertent release of drilling mud along the drill path during the offshore drilling operations, an eelgrass specialist shall develop a detailed eelgrass mitigation plan in consultation with the WDFW Area Habitat Biologist. The eelgrass mitigation plan shall be subject to WDFW approval prior to implementation. The eelgrass mitigation plan shall be submitted to Ecology for review.

G16. The existing coastal marsh, wetlands, and stream adjacent to the Gulf Road pipe string fabrication and launch areas shall not be impacted by the pipe string fabrication and launch operations.

H. Construction Conditions:

H1. During construction, the Applicant shall comply with all stormwater requirements within the Stormwater General permit for Construction Activity issued for this project or any individual stormwater discharge permit Ecology may issue for this project.

H2. All construction debris or deleterious material shall be properly disposed of at an approved solid waste facility and according to local solid waste regulations (Chapter 173-350 WAC). Prior to disposal, the Applicant shall consult with the local health department.

H3. All excess excavated material shall be disposed of above the 100-year floodplain and shall be contained and stabilized using a combination of Best Management Practices (BMPs) listed in the Stormwater Management Manual for Western Washington dated August 2001 in order to prevent pollution into waters of the state.

H4. Erosion and sediment control BMPs listed in the Stormwater Management Manual for Western Washington dated August 2001 suitable to prevent erosion of soils and subsequent exceedances of state water quality standards shall be implemented and in place before starting project construction.

H5. The project shall be clearly marked/staked prior to construction. Clearing limits, travel corridors and stockpile sites shall be clearly marked. Sensitive areas to be protected from disturbance shall be delineated and marked with brightly colored construction fence, so as to be clearly visible to equipment operators. Equipment shall enter and operate only within the delineated clearing limits, corridors and stockpile areas.

H6. The Applicant shall include BMPs for all in-water and over water construction activities in the Stormwater Pollution Prevention Plan (SWPPP) for this project.

H7. All BMPs shall be inspected, maintained, and repaired as needed to assure continued performance of their intended function. All on-site erosion and sediment control measures shall be inspected at least once every seven (7) days and within 24 hours after any storm event of greater than 0.5 inches of rain per 24-hour period.

H8. Whenever self inspection reveals that the BMPs implemented on site are inadequate, due to the actual discharge or the potential to discharge a significant amount of any pollutant, the BMPs shall be modified or enhanced as expeditiously as practicable to stop, contain and clean up any discharge of pollutants and to prevent violations of state water quality standards.

H9. Reports summarizing the scope of inspections, the personnel conducting the inspection, the results of turbidity sampling (both visual and physical), the date of the inspection and/or sample event, and actions taken as a result of the inspections or monitoring results shall be prepared and retained as part of the water quality monitoring plan and made available to Ecology upon request.

H10. At the completion of construction, hydroseeding may be used to stabilize slopes and soils until other required planting is completed. Hydroseed mix shall consist of native, non-invasive, or annual plant species only, in accordance with BMP C120 "Temporary and permanent seeding" as described in the Stormwater Management Manual for Western Washington.

H11. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall not be discharged into state waters except as authorized by an NPDES or state waste discharge permit.

H12. Drilling mud shall be handled in such a way that it does not enter waters of the state for all aspects of the project except the glory hole in marine waters. At the glory hole, discharge of drilling mud shall be minimized.

I. Hydrostatic Test Water Discharge:

I1. The water from the hydrostatic testing shall be sampled for turbidity, pH, metals and temperature. The sampling shall be completed during the first day of operation and then every day hydrostatic testing occurs thereafter to determine the concentration of pollutants present within the hydrostatic test water. The frequency of this requirement may be waived or amended by Ecology in writing.

a. Sampling results shall be submitted to Ecology's Federal Permit Coordinator [fax (425) 649-7098], and to Andrew Craig, Water Quality Inspector at the Department of Ecology's Bellingham Field Office [Phone: (360) 738-6250. Fax: (360) 738-6253]. If sampling indicates exceedances of state surface or ground water quality standards (Chapters 173-201A WAC and 173-200 WAC), treatment of the hydrostatic test water is required prior to discharging such water to surface or ground waters of the state.

b. Hydrostatic test water shall be infiltrated into soils to the maximum extent possible before discharging to surface waters.

J. Emergency/Contingency Measures:

J1. Any in-water work that is out of compliance with the provisions of this Order, or any discharge of oil, fuel, or chemicals into state waters, including wetlands, or onto land with a potential for entry into state waters, is prohibited. If these occur, the operator shall immediately take the following actions:

- Cease operations.
- Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.

- In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

J2. Spills of petroleum products or chemicals into state waters, spills onto land with a potential for entry into state waters, or other significant water quality impacts, shall be reported immediately to Ecology's Northwest Regional Office Spill Response at (425) 649-7000.

J3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters, including wetlands.

J4. Construction monitoring: During and immediately after project construction, the Applicant or contractor shall visually monitor the area for distressed or dying fish. If water quality exceedances are observed outside the dilution zone, in-water work shall cease immediately and the Applicant or the contractor shall contact Ecology's Northwest Regional Office Spill Response at (425) 649-7000.

K. General Conditions:

K1. This Order shall be valid during construction and long-term operation and maintenance of the project.

K2. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in conditions of this Order.

K3. This Order does not exempt and is conditioned upon compliance with other statutes and codes administered by federal, state, and local agencies.

K4. The Applicant shall designate, or on-call and readily accessible to the site, at all times, an environmental inspector (EI) or Pollution Control Officer (PCO). The EI or PCO shall be the primary point of contact for inspections, monitoring, discharge approvals, and reporting. The EI or PCO shall have adequate authority to ensure proper implementation of all the conditions within this Order, as well as immediate corrective actions necessary because of changing field conditions. If the EI or PCO issues an directive necessary to implement a condition of this Order or to prevent pollution to waters of the state, all personnel on site, including the Applicant's personnel, construction contractor and/or sub contractor's employees, shall immediately comply with this directive.

K5. The Applicant shall construct and operate the project in a manner consistent with the project description contained in the JARPA and Public Notice for certification, or as

otherwise approved by Ecology.

K6. The Applicant shall reapply with an updated application for certification if five years elapse between the date of the issuance of this Order and the beginning of construction and/or discharge for which the federal license or permit is being sought.

K7. The Applicant shall reapply with an updated application if the information contained in the JARPA or Public Notice is voided by subsequent submittals to the federal agency. Any future action at this project location, emergency or otherwise, that is not defined in the public notice, or has not been approved by Ecology, is not authorized by this Order. All future actions shall be coordinated with Ecology for approval prior to implementation of such action.

K8. The Applicant shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, necessary data collection, or to ensure that conditions of this Order are being met.

K9. Copies of this Order and all related permits, approvals, and documents shall be kept on the project site and readily available for reference by the project managers, construction managers and foremen, other employees and contractors of the Applicant, and state agency personnel.

K10. The Applicant shall ensure that all appropriate supervisors and contractors at the project site and mitigation sites have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. **The Applicant shall provide to Ecology a signed statement from each supervisor and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents and approvals.** These statements shall be provided to Ecology no less than 7 (seven) days before construction begins at the project or mitigation sites. The Applicant shall also provide a similar signed statement to Ecology from each new supervisor or contractor hired or assigned after the project begins within 30 days of hiring.

K11. Ecology retains continuing jurisdiction to make modifications hereto through supplemental Order, if it appears necessary to further protect the public interest.

K12. This Order does not confer right of access to property not owned by the Applicant. It is the Applicant's responsibility to obtain ownership or legal access to all properties and have supporting documentation available upon Ecology's request.

Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars ($10,000) per violation for each day of noncompliance.

Any person aggrieved by this Order may obtain review thereof by appeal. The Applicant can appeal up to 30 days after receipt of the permit, and all others can appeal up to 30 days from the

postmarked date of the permit. The appeal must be sent to the Washington Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA 98504-0903. Concurrently, a copy of the appeal must be sent to the Department of Ecology, Shorelands and Environmental Assistance Program, P.O. Box 47600, Olympia, WA 98504-7600. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

Dated 9/23/04 at Bellevue, Washington.

Jeannie Summerhays, Section Manager
Shorelands and Environmental Assistance Program
Department of Ecology
State of Washington

Georgia Strait Crossing Pipeline LP
Water Quality Certification # 1704

Statement of Understanding of
Water Quality Certification Conditions

I have read and understand the conditions of Order # 1704 Water Quality Certification for the **Georgia Strait Crossing Pipeline LP**. I have also read and understand all other permits, plans, documents and approvals associated with the **Georgia Strait Crossing Pipeline LP.**

_____ _____
Signature Date

_____
Title

_____
Company